PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

To: CARPMAELS & RANSFORD Attn. Tunstall, C.S. 43-45 Bloomsbury Square London WC1A 2RA (p4 GRANDE BRETAGNE

PCT

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT AND THE WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY, OR THE DECLARATION

(PCT Rule 44.1)

	(FOT Hale +1:1)			
	Date of mailing (day/month/year) 22/08/2007			
Applicant's or agent's file reference				
P043972WO	FOR FURTHER ACTION See paragraphs 1 and 4 below			
International application No.	International filing date			
PCT/GB2007/001973	(day/month/year) 29/05/2007			
Applicant				
GILAG GMBH INTERNATIONAL				
The applicant is hereby notified that the international search Authority have been established and are transmitted herewi	report and the written opinion of the International Searching th.			
Filing of amendments and statement under Article 19: The applicant is entitled, if he so wishes, to amend the clain When? The time limit for filing such amendments is nor international Search Report.				
Where? Directly to the International Bureau of WIPO, 34 1211 Geneva 20, Switzerland, Fascimile No.: (4 For more detailed instructions, see the notes on the ac	1-22) 338.82.70			
The applicant is hereby notified that no international search				
Article 17(2)(a) to that effect and the written opinion of the Ir	nternational Searching Authority are transmitted herewith.			
 With regard to the protest against payment of (an) addition 	nal fee(s) under Rule 40.2, the applicant is notified that:			
the protest together with the decision thereon has bee applicant's request to forward the texts of both the pro no decision has been made yet on the protest; the app	n transmitted to the International Bureau together with the test and the decision thereon to the designated Offices. licant will be notified as soon as a decision is made.			
4. Reminders				
Shortly after the expiration of 18 months from the priority date, th International Bureau. If the applicant wishes to avoid or postpone application, or of the priority claim, must reach the International B before the completion of the technical preparations for internation I	publication, a notice of withdrawal of the international ureau as provided in Rules 90b/s.1 and 90b/s.3, respectively.			
The applicant may submit comments on an informal basis on the International Bureau. The International Bureau will send a copy of international preliminary examination report has been or is to be e the public but not before the expiration of 30 months from the prior	such comments to all designated Offices unless an established. These comments would also be made available to			
Within 19 months from the priority date, but only in respect of sor examination must be filed if the applicant wishes to postpone the date (in some Offices even later); otherwise, the applicant must, w acts for entry into the national phase before those designated Offi	entry into the national phase until 30 months from the priority vithin 20 months from the priority date, perform the prescribed			
In respect of other designated Offices, the time limit of 30 months months.	(or later) will apply even if no demand is filed within 19			
See the Annex to Form PCT/IB/301 and, for details about the app Guide, Volume II, National Chapters and the WIPO Internet site.	licable time limits, Office by Office, see the PCT Applicant's			

Authorized officer

Josephina Tschuck

Form PCT/ISA/220 (October 2005)

Name and mailing address of the International Searching Authority

European Patent Office, P.B. 5818 Patentlaan 2

NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patient Cooperation Treaty, the Regulations and the Administrative instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the *PCT Admicastic Salide* a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions, respectively.

INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report and the written opinion of the international Searching Authority, one opportunity to amend the claims of the international application. It is hould however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international perintinary examination procedure, there is usually no need to the amendments of the claims under Arricle 19 international perintinary examination procedure, there is usually no need to the amendments of the claims under Arricle 19 reason for any open of the control of the process of the claims control of the control of the process of the claims control of the claims of

The attention of the applicant is drawn to the fact that amendments to the claims under Article 19 are not allowed where the terrational Searching Authority has declared, under Article 17(2), that no international search report would be established (see PCT Applicant's Guide, Volume I/A, paragraph 296).

What parts of the international application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

When?

Within 2 months from the date of transmittal of the international search report or 15 months from the priority date, withoever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the international Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Bule 46.2).

Where a demand for International preliminary examination has been/is filed, see below.

How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

What documents must/may accompany the amendments?

Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims, it should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

FOR FURTHER

P043972WO	ACTION	as well as, where applicable, item 5 below.				
International application No. International filing date (day/month/year) (Earliest) Priority Date (day/month/year)						
PCT/GB2007/001973 29/05/2007 01/06/2006						
Applicant						
GILAG GMBH INTERNATIONAL						
according to Article 18. A copy is being tra This international search report consists o	insmitted to the International Bureau. f a total of4 sheet	8.				
X It is also accompanied by	a copy of each prior art document cit	ed in this report.				
a translation of the of a translation fur	pplication in the language in which it e international application into mished for the purposes of internation					
2. Certain claims were four	nd unsearchable (See Box No. II)					
3. Unity of invention is lack	ting (see Box No III)					
With regard to the title,						
the text is approved as sul	hmitted by the applicant					
=	ned by this Authority to read as follow	rs:				
INJECTION DEVICE WITH	SYRINGE CARRIER ENGAGE	MENT WITH CAP				
5. With regard to the abstract,						
X the text is approved as sut the text has been establish may, within one month from	ned, according to Rule 38.2(b), by this	s Authority as it appears in Box No. IV. The applicant onal search report, submit comments to this Authority				
With regard to the drawings,						
a. the figure of the drawings to be po	ublished with the abstract is Figure N	03				
X as suggested by the	ne applicant					
=	Authority, because the applicant fail					
	Authority, because this figure better	characterizes the invention				
b none of the figures is to be	published with the abstract					
orm PCT/ISA/210 (first sheet) (April 2005)						

Applicant's or agent's file reference

INTERNATIONAL SEARCH REPORT International application No PCT/GB2007/001973 A. CLASSIFICA HONOT INV. A61M5/32 CLASSIFICATION OF SUBJECT MATTER A61M5/20 According to International Patent Classification (IPC) or to both national classification and IPC B FIELDS SEADCHED Minimum documentation searched (classification system tollowed by classification symbols) A61M Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. EP 0 857 491 A (RHONE POULENC RORER GMBH χ 1-3,6,8, [DE]) 12 August 1998 (1998-08-12) 13 - 15Α figures 1-9 4.7.9 - 12column 19, line 39 - column 27, line 49 X GB 2 414 398 A (CILAG AG INTERNAT [CH]) 1.2.5.8. 30 November 2005 (2005-11-30) 13-15 figures 1-8 page 5, line 12 - page 10, line 25 χ WO 99/03529 A (OWEN MUMFORD LTD [GB]: 1,2,15 CROSSMAN DAVID DANVERS [GB]: MARSHALL JEREMY [G) 28 January 1999 (1999-01-28) figures 1-7 page 4, line 18 - page 8, line 21 -/--X Further documents are listed in the continuation of Box C. X See patent family annex Special categories of cited documents "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance invention "E" earlier document but published on or after the international 'X' document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

- 'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- Date of the actual completion of the international search

'P' document published prior to the international filing date but later than the priority date claimed

'Y' document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-ments, such combination being obvious to a person skilled Date of mailing of the international search report

"&" document member of the same patent family

14 August 2007

Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NI - 2280 HV Rijewijk

Tel. (+31-70) 340-2040, Tx. 31 651 epo nl. Fax: (+31-70) 340-3016

22/08/2007

Authorized officer

Reinbold, Sylvie

INTERNATIONAL SEARCH REPORT

International application No PCT/GB2007/001973

C(Continua	ation). DOCUMENTS CONSIDERED TO BE RELEVANT	1017 4820077 001373
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
(,P <i>(</i>	W0 2007/047200 A (LILLY CO ELI [US]; JAMES ADRIAN BENTON [US]; LISTER ROBERT IAN [GB]; M) 26 April 2007 (2007-04-26) figures 1-33 page 6, line 3 - page 26, line 7; claim 9	1-7, 13-15

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/GB2007/001973

					1	,	,
Patent document cited in search report			Publication date	Patent family member(s)		Publication date	
ΕP	0857491	Α	12-08-1998	AU	1266397	' A	20-08-1998
				BR	9700930) A	08-12-1998
				CA	2197395		12-08-1998
				CZ	9700415		12-08-1998
				DE	19705189		13-08-1998
				HU	9700427		28-06-1999
				JP	1022551€		25-08-1998
				NO	970606		11-08-1998
				NZ	314211		28-01-1999
				US	6090070		18-07-2000
				ZA	9701138	A	11-08-1998
GB	2414398	Α	30-11-2005	NONE			
WO	9903529	Α	28-01-1999	DE	69822160	D1	08-04-2004
				DE	69822160	T2	30-12-2004
				DE	69829787	D1	19-05-2005
				DE	69829787	T2	09-03-2006
				EP	1364667		26-11-2003
				EP	0996473		03-05-2000
				JP	2001512038		21-08-2001
				US	2003093036		15-05-2003
				US	7066907	B2	27-06-2006
	2007047200	Α	26-04-2007	NONE			

PATENT COOPERATION TREATY

INTERNATIONAL SEARCHING AUTHORITY To: see form PCT/ISA/220			HORITY	PCT WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)				
				Date of mailing (day/month/year)	see form PCT/ISA/210 (second sheet)			
	icant's or agent's file form PCT/ISA/2			FOR FURTHER ACTION See paragraph 2 below				
International application No. International filing da PCT/GB2007/001973 29.05.2007				(day/month/year)	Priority date (day/month/year) 01.06.2006			
	national Patent Clas . A61M5/32 A61		or both national classification	and IPC				
Appl GIL	icant AG GMBH INTE	RNATIONAL	-					
1.	This opinion co	ontains indica	itions relating to the fol	lowing items:				
	Box No. I	Basis of the	opinion					
	☐ Box No. II	Priority						
	☐ Box No. III	Non-establis	hment of opinion with rec	ard to novelty, invent	tive step and industrial applicability			
Box No. IV Lack of unity of invention				•	,			
			atement under Rule 43bi citations and explanation	s.1(a)(i) with regard t s supporting such sta	o novelty, inventive step or industrial atement			
	Box No. VI	Certain documents cited						
	Box No. VII	Certain defe	cts in the international application					
	☐ Box No. VIII	Certain obse	rvations on the internatio	nal application				
2.	FURTHER ACT	ION						
	written opinion of the applicant cho	f the Internation ooses an Autho eau under Rui	nal Preliminary Examinin	g Authority ("IPEA")	ill usually be considered to be a except that this does not apply where e chosen IPEA has notifed the autional Searching Authority			
	submit to the IPE	A a written re	ply together, where appro	priate, with amendm	e IPEA, the applicant is invited to lents, before the expiration of 3 months nonths from the priority date,			

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:

whichever expires later.

European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465 Date of completion of this opinion

see form PCT/ISA/210 Authorized Officer

Reinbold, Sylvie Telephone No. +49 89 2399-7918



WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/GB2007/001973

_		
_	Bo	No. I Basis of the opinion
1.	Wit	regard to the language, this opinion has been established on the basis of:
	\boxtimes	the international application in the language in which it was filed
		a translation of the international application into , which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1 (b)).
2.	Wit nec	regard to any nucleotide and/or amino acid sequence disclosed in the international application and ssary to the claimed invention, this opinion has been established on the basis of:
	a. t	pe of material:
	1	a sequence listing
	1	table(s) related to the sequence listing
	b. fo	mat of material:
	1	on paper
	1	in electronic form
	c. ti	ne of filing/furnishing:
	I	contained in the international application as filed.
	I	filed together with the international application in electronic form.
	I	furnished subsequently to this Authority for the purposes of search.
3.		n addition, in the case that more than one version or copy of a sequence listing andor table relating theret has been filed or furnished, the required statements that the information in the subsequent or additional opples is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
1	Ada	ional comments:

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N) Yes: Claims 4,7,9-12

No: Claims <u>1-3,5-6,8,13-15</u>

Inventive step (IS) Yes: Claims

No: Claims <u>1-15</u>

Yes: Claims 1-15

No: Claims

2. Citations and explanations

Industrial applicability (IA)

see separate sheet

Box No. VI Certain documents cited

1. Certain published documents (Rules 43bis.1 and 70.10)

and / or

2. Non-written disclosures (Rules 43bis.1 and 70.9)

see form 210

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Reference is made to the following documents:

D1: GB-A-2 414 398 D2: EP-A-0 857 491 D3: WO 99/03529 D4: WO 2007/047200

Novelty Article 33(2) PCT

- The present application does not appear to meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1-3,5,6,8 and 13-15 is not new in the sense of Article 33(2) PCT.
- 2.1. The document D1 discloses an injection device (figures 1-9) comprising:
 - a housing (4) adapted to receive a syringe (8) having a reservoir and a discharge nozzle (19), so that the syringe is movable between a retracted position (fig.7) in which the discharge nozzle is contained within the housing and an extended position (column 24 line 39 column 25 line 10) in which the discharge nozzle extends from the housing through an exit aperture
 - a drive (38+37) that acts upon the syringe to advance it from its retracted position to its extended position and discharge its contents through the discharge nozzle
 - a removable cap (18)
 - a syringe carrier (24) for carrying the syringe as it is advanced
 - wherein the removable cap (18) is adapted to restrict movement of the syringe carrier in a direction towards the exit aperture when the removable cap is connected to the housing (fig.7)

Therefore the subject matter of claim 1 is not novel over document D1.

2.2. Furthermore the technical features of claims 2,3,6,8 and 13-15 are also shown by document D1.

- Finally documents D2-D3 also disclose the technical features of claims 1-2,5,8 and 13-15.
 - Document D2: fig.1-8, a housing (112), a syringe (114), a drive (132), a removable cap (111) is adapted to restrict the movement of the syringe carrier (127) (page 9 line 26-28)
 - Document D3: fig.1-7, a housing (7), a syringe (12), a drive (14), a removable cap (26) is adapted to restrict the movement of the syringe carrier (12) (fig.1-2)

Inventive Step Article 33(3) PCT

 The present application does not appear to meet the criteria of Article 33(1) PCT, because the subject-matter of claims 4,7 and 9-12 does not involve an inventive step in the sense of Article 33(3) PCT.

The subject-matter of claims 4,7 and 9-12 differs from this known injection device of Document D1 in that:

- the first interface and the second interface each comprise a planar surface
- the annular component is adapted to grip a removable shield on the discharge nozzle of the syringe
- a sliding sleeve and at least one locking arm which is engageable with the annular protrusion

However, in these claims a slight constructional change in the injection device of claim 1 is defined which comes within the scope of the customary practice followed by persons skilled in the art, especially as the advantages thus achieved can readily be foreseen. Consequently, the subject-matter of these claims also lacks an inventive step.

Re Item VI

Certain documents cited

Having regards to Rule 64.3 and 70.10 PCT it is hereby indicated that the document WO2007/047200 (D4) has a publication date of 26.04.2007 and a priority date of 1.1.10.2005. It appear that document D4 take away the novelty of claims 1-7 and 13-15. The applicant is asked to explain the difference between the application and the explicit

and implicit of the disclosure of Document D4.

Re Item VII

Certain defects in the international application

- Independent claim 1 is not in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would be appropriate, with those features known in combination from the prior art (document D3) being placed in the preamble (Rule 6.3(b)(i) PCT) and with the remaining features being included in the characterising part (Rule 6.3(b)(ii) PCT).
- The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).
- Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1-D3 are not mentioned in the description, nor are these documents identified therein.
- Claim 15 contain a reference to the drawings. According to Rule 6.2(a) PCT, claims should not contain such references except where absolutely necessary, which is not the case here.
- The applicant is requested to file amendments by way of replacement pages in the manner stipulated by Rule 66.8(a) PCT. In particular, fair copies of the amendments should be filed preferably in triplicate.

Moreover, the applicant's attention is drawn to the fact that, as a consequence of Rule 66.8(a) PCT the examiner is not permitted to carry out any amendments under the PCT procedure, however minor these may be.

Possible steps after receipt of the international search report (ISR) and written opinion of the International Searching Authority (WO-ISA)

General information

For all international applications filed on or after 01/01/2004 the competent ISA will establish an ISR. It is accompanied by the WO-ISA. Unlike the former written opinion of the IPEA (Rule 66.2 PCT), the WO-ISA is not meant to be responded to, but to be taken into consideration for further procedural steps. This document explains about the possibilities.

under Art. 19 PCT

Amending claims Within 2 months after the date of mailing of the ISR and the WO-ISA the applicant may file amended claims under Art. 19 PCT directly with the International Bureau of WIPO, The PCT reform of 2004 did not change this procedure. For further information please see Rule 46 PCT as well as form PCT/ISA/220 and the corresponding Notes to form PCT/ISA/220.

Filing a demand for international preliminary examination

In principle, the WO-ISA will be considered as the written opinion of the IPEA. This should, in many cases, make it unnecessary to file a demand for international preliminary examination. If the applicant nevertheless wishes to file a demand this must be done before expiry of 3 months after the date of mailing of the ISR/WO-ISA or 22 months after priority date, whichever expires later (Rule 54bis PCT). Amendments under Art. 34 PCT can be filed with the IPEA as before, normally at the same time as filing the demand (Rule 66.1 (b) PCT).

If a demand for international preliminary examination is filed and no comments/amendments have been received the WO-ISA will be transformed by the IPEA into an IPRP (International Preliminary Report on Patentability) which would merely reflect the content of the WO-ISA. The demand can still be withdrawn (Art. 37 PCT).

Filing informal comments

After receipt of the ISR/WO-ISA the applicant may file informal comments on the WO-ISA directly with the International Bureau of WIPO. These will be communicated to the designated Offices together with the IPRP (International Preliminary Report on Patentability) at 30 months from the priority date. Please also refer to the next box.

End of the international phase

At the end of the international phase the International Bureau of WIPO will transform the WO-ISA or, if a demand was filed, the written opinion of the IPEA into the IPRP, which will then be transmitted together with possible informal comments to the designated Offices. The IPRP replaces the former IPER (international preliminary examination report).

Relevant PCT Rules and more information

Rule 43 PCT, Rule 43bis PCT, Rule 44 PCT, Rule 44bis PCT, PCT Newsletter 12/2003, OJ 11/2003, OJ 12/2003